

# **Virginia Commonwealth University**

**Higher Education Instruction, Higher Education  
Research, and Higher Education Public Service  
(PBA IDs 345-347)**



## **Quick-Check Year 2000 Readiness Review Report**

**June 30, 1999**

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## 1.0 EXECUTIVE SUMMARY

This Executive Summary provides a high-level view of the results of the Year 2000 Readiness Review of the Virginia Commonwealth University (VCU), Higher Education Instruction, Higher Education Research, and Higher Education Public Service Priority Business Activities (PBAs). The procedures and structure of the review conform to the Century Date Change Initiative (CDCI) Project Office guidelines. The Review Team performed this review in an independent fashion. The review was intended to assist the agency in achieving Year 2000 compliance and reaching due diligence certification for the PBAs in a timely manner.

Figure 1-1 displays the score for each of the 10 risk areas assessed—Information Systems, Facilities & Embedded Technology, Telecommunications, Supply Chain, Data Exchange, Management & Project Planning, Testing & Validation, Legal, Documentation, and Risk Management & Contingency Planning. Each score ranges from 0 - 100 and is computed by summing the scores of the 10 review items used to determine the level of risk for the area in question. The reader should understand that the size of any risk gap shown on the chart may be unrelated to the time and effort to close the gap.

While numerical scores are helpful for some purposes, the agency should not rely on the scores included in this report alone to make key decisions regarding their Year 2000 compliance program. Instead, it should rely on the findings, recommendations, and other comments in this report, together with all other related information at hand.

Due to the commonality of systems across all three PBAs, they were combined into one report and checklist.

After receiving Year 2000 recommendations from its Audit and Management Services Department, VCU instituted a formal Year 2000 project in 1997. At that time, the University President appointed the Vice Provost for Information Technology as the Year 2000 Project Executive Sponsor. The Project Executive Sponsor then appointed a VCU Year 2000 Project Manager to lead its compliance activities and efforts for the mission critical information systems, the University Computing Center, telecommunications, facilities, and other less significant organizations within VCU. Upon establishment of this effort, the VCU Year 2000 Project Manager began aggressive assessments of compliance and identification of remediation strategies. This early identification of the need to assess potential Year 2000 issues at the University and the institution of a formal Year 2000 program have allowed VCU to make substantial progress in assessing, remediating, testing and validating their mission critical systems, the University Computing Center, telecommunications, and its facilities. Strong senior management support and effective project management have also aided the project. In addition, the Year 2000 project has been the Office of Information Technology's top priority for the past year and the focus of a majority of the information technology efforts throughout the University.

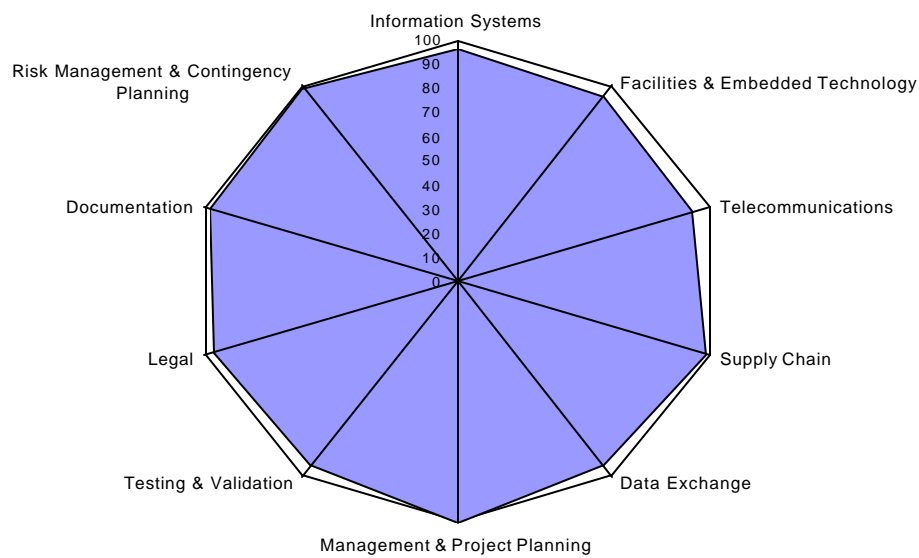
At the time of this review, VCU has implemented the Year 2000 compliant versions of all its four of its mission critical systems. The University Computing Center was established within

the past few years and, therefore, required minimal Year 2000 remediation efforts. VCU has been aggressively addressing its telecommunications Year 2000 issues and has remediated those facility systems with compliance issues.

The Review Team identified no findings for these PBAs.

Based on the results of our assessment of the Virginia Commonwealth University's Year 2000 project initiatives, no Quick-Check risk areas require follow-on verification.

**Figure 1-1 Risk Ratings**



**Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs**

**Risk Rating: 96 – Very Low Risk**

**Key**

90 – 100	Very Low Risk
80 – 89	Low Risk
70 – 79	Moderate Risk
60 – 69	Medium Risk
50 – 59	High Risk
30 - 49	Very High Risk
10 - 29	Extreme Risk
0 - 9	Non-Compliant

## **2.0 OVERVIEW**

During the period from June 2, 1999 to June 30, 1999 the Review Team conducted a Year 2000 Readiness Review of the Higher Education Instruction, Higher Education Research, and Higher Education Public Service Priority Business Activities (PBAs). The Readiness Review was requested by Bette Dillehay, Director of the CDCI Project Office, as part of a proactive effort to evaluate the Year 2000 readiness of the Commonwealth's various PBAs. The review was intended to help VCU determine what other actions it might take to enhance the Year 2000 readiness of its PBAs. It was also intended to identify areas where the agency's PBA are doing well (Key Positives) so that they can potentially be shared across the Commonwealth as "Best Practices."

Five of the risk areas—Information Systems, Facilities and Embedded Technology, Telecommunications, Supply Chain, and Data Exchange—address areas identical to those used by agencies to report progress on Year 2000 compliance to the CDCI Project Office. However, because the Quick-Check Year 2000 Readiness Review assesses risk, and CDCI's Progress 2000 system measures Year 2000 program progress, an agency could show good progress in CDCI's Progress 2000 system and still receive a poor score from the Quick-Check Readiness Review, and vice versa.

The remaining five risk areas—Management and Project Planning, Testing and Validation, Legal, Documentation, and Risk Management and Contingency Planning—relate to the processes being used by the agency to achieve Year 2000 compliance and to actions that must be taken should those efforts prove unsuccessful.

### **2.1 PURPOSE**

The purpose of the Quick-Check Year 2000 Readiness Review was to evaluate key elements of the Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs' Year 2000 compliance efforts. In this report, the Review Team has documented areas of concern and potential risk, and provided general recommendations for corrective and mitigating actions. The Review Team believes that the report provides a high-level snapshot of the relative health and current status of the PBAs' Year 2000 compliance efforts.

### **2.2 SCOPE AND LIMITATIONS**

The scope of this review includes the 10 risk areas as they apply to the Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs. While these risk areas are intended to be comprehensive, the agency may face special risks that go beyond the 10 areas reviewed.

This review was performed within predetermined time and resource limitations.

The results of the review depend largely upon the information that the Review Team was able to gather from the agency during the course of the review. Due to the limited scope of the Quick-Check Year 2000 Readiness Review, no effort was made to confirm the accuracy of the information that was gathered.

## **2.3 APPROACH**

This review was accomplished through a series of short interviews with VCU personnel and through a high-level review of documentation associated with the Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs' Year 2000 compliance efforts. The basis for both the personnel interviews and the documentation review was the Quick-Check Year 2000 Readiness Review Checklist. Each of the previously identified risk areas was scored on a scale of 0 - 100. The overall PBAs, in turn, were given a score on a scale of 0 - 100, reflecting the average of the scores received for each risk area.

The objective of the Quick-Check Year 2000 Readiness Review was to determine, for each risk item within each risk area, if the agency fully addressed that risk item for the PBAs. If the agency did not fully address the risk item for the PBAs, the Review Team attempted to identify:

- The impact on the schedule of the PBAs' readiness.
- The impact on the performance of the PBAs' readiness effort.
- The magnitude of the effort required to mitigate risk in this area.

## **2.4 AGENCY SPECIFIC CONSTRAINTS**

No constraints existed for the Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs Year 2000 Readiness Review.

# **3.0 KEY POSITIVES, FINDINGS, AND RECOMMENDATIONS**

This section identifies those key positives relative to the Higher Education Instruction, Higher Education Research, and Higher Education Public Service PBAs Year 2000 compliance efforts, which the Review Team considers worthy of potential "Best Practices." It also includes findings resulting from the review and recommendations specific to those findings. The findings and recommendations are shown in Table 3-1.

## **3.1 KEY POSITIVES**

Higher Education Instruction, Higher Education Research, and Higher Education Public Service personnel demonstrated a positive attitude toward project success and have taken a number of positive steps toward improving their chances for a successful and timely completion of the project. Some of these positive indicators are as follows:

- In 1996, VCU's Audit and Management Services department recognized the need to assess the University's systems, hardware, and embedded chip equipment for potential Year 2000 problems. This early identification led to the institution of a formal Year 2000 program in 1997, for assessing, remediating, testing and validating the University's mission critical information systems, telecommunications, and facilities systems and the University Computing Center, as well as the less significant University systems.
- In 1998, the President of VCU formally announced to the entire University that a structured Year 2000 project had been established with a single VCU Year 2000 Project Manager to lead its efforts. Throughout the course of its Year 2000 efforts, VCU has had the same Year 2000 Project Manager and he has been heavily involved in all aspects of assessing, remediating, testing, and implementing the mission critical information systems, telecommunications, and facilities systems and the University Computing Center. This consistency in leadership has been key in maintaining the Year 2000 as a top priority for VCU.
- The Year 2000 project has received strong support from University senior management, including the Board of Visitors, the President's Council, and the Year 2000 Advisory Committee. The Board of Visitors receives a quarterly briefing on the Year 2000 progress and the President's Council receives monthly progress reports. The Year 2000 Advisory Committee receives regular updates from the Year 2000 Project Manager.
- The Office of Information Technology, where the VCU Year 2000 Project Manager is located, accepted ownership of the Year 2000 project and has made this project its top priority since the inception of this project.
- In 1998, VCU contracted with PricewaterhouseCoopers LLP to conduct quarterly reviews of VCU's Year 2000 efforts and to provide recommendations for future efforts and activities, as well as identify potential risk areas.
- In 1998, VCU implemented an aggressive retention program aimed at its critical Year 2000 staffing resources, including the Year 2000 Project Manager and key personnel involved in the remediation of the mission critical systems. This retention program was structured to ensure that the critical resources remained at the University until after the century change.
- Three of the mission critical systems were vendor-supplied applications and, therefore, they required only the implementation and testing of the vendors' Year 2000 compliant upgrades. The fourth mission critical system was being replaced with a new vendor-provided Year 2000 compliant system that would give the University additional system functionality.
- Within the past few years, VCU established the University Computing Center where the mission critical information systems' mainframe is operated and maintained. Due to the fairly recent acquisition of the hardware and software necessary to establish this University Computing Center, there were less significant Year 2000 issues that were quickly addressed.

- The receipt of Year 2000 project funding allowed for the procurement of a separate testing environment for the mission critical information systems. The mission critical information system upgrades and the one replacement were tested in the testing environment prior to their implementation. VCU is planning a final comprehensive test of each mission critical information system in the October/November 1999 timeframe to ensure that all patches, upgrades, and modifications are Year 2000 compliant.
- VCU has reviewed its listing of several thousand vendors and service partners and has prioritized the 250 vendors considered most critical to the University as a whole. VCU has proactively contacted these 250 vendors with regards to their Year 2000 efforts and status and has published the responses on the VCU Year 2000 web page. In addition, the VCU Year 2000 Project Manager has queried all of VCU project leaders for other vendors to be contacted and added these to the list of vendors to be contacted.

## **3.2 FINDINGS AND RECOMMENDATIONS**

A finding is an issue discovered during the review process that is considered a significant risk. Findings are listed in Table 3-1 according to the risk area where the issue first surfaced. Recommendations are related to the findings. For each finding listed in Table 3-1, one or more recommendations are given.

The Review Team identified no findings for this PBA, therefore, Table 3-1 is not in the report.

## **4.0 NEXT STEPS**

Based on the positive results of the Quick Check Year 2000 Readiness Review, no follow-on verification is required for this PBA.